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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/815,838	04/02/2004	Osamu Kitazawa	065905-0318	9686

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EXAMINER

JOERGER, KAITLIN S

ART UNIT

PAPER NUMBER

3653

DATE MAILED: 05/22/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

10/815,838

Applicant(s)

KITAZAWA, OSAMU

Examiner

Kaitlin S. Joerger

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-9 and 11-14 is/are rejected.
- 7) ☐ Claim(s) 10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 02 April 2004 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date 4/2/04.
- ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- ☐ Notice of Informal Patent Application (PTO-152)
- ☐ Other: \_\_\_\_.

## DETAILED ACTION

### *Claim Rejections - 35 USC § 103*

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-9 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Taniyama (6,932,337) in view of JP 04066466 A.

Regarding independent claim 1, Taniyama teaches a paper supply device comprising:

- a paper supply roller, 80, that rotates in the sheets of paper supplying direction;
- a separation roller, 81, that holds the sheets of paper with the paper supply roller and maintains a driving force in the direction reverse to the paper supplying direction.

Regarding dependent claims 3 and 4, Taniyama further teaches:

- the paper supply roller is connected to a driving mechanism, column 4, lines 11+, for rotating in the sheet supplying direction at one end of the shaft and press fits to the separation rollers using one ends of the shaft are a revolving point, see figure 2;
- the separation roller retains the driving force in the direction reverse to the paper supplying direction via a torque limiter, 84.

Regarding claims 1 and 2, Taniyama teaches all of the features of the claimed invention except for a weight to press fit the paper supply roller to the separation roller by applying a load to the paper supply roller. The JP '466 patent teaches a weight, 4, that is mounted on the shaft of a roller. It would have been obvious to one of ordinary skill in the art at the time the invention

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was made to combine the weight taught by the JP '466 patent with the supply device of Taniyama in order to improve stability and reliability of the paper supply device by ensuring that the supply roller and separation roller remain in contact with each other.

Regarding independent claim 5, Taniyama teaches a paper supply device comprising:

- a paper supply roller, 80, that rotates in the sheets of paper supplying direction;
- a separation roller, 81, that holds the sheets of paper with the paper supply roller and maintains a driving force in the direction reverse to the paper supplying direction;
- an elastic member, 88 and 90, that press fits the paper supply roller to the separation roller by applying the compression force to the separation roller.

Regarding dependent claims 6, 7, and 9, Taniyama further teaches:

- the elastic member presses the paper supply roller to the separation roller, and the paper supply roller is press fit to the separation roller;
- the paper supply roller is connected to a driving mechanism, column 4, lines 11+, for rotating in the sheet supplying direction at one end of the shaft and press fits to the separation rollers using one ends of the shaft are a revolving point, see figure 2;
- the separation roller retains the driving force in the direction reverse to the paper supplying direction via a torque limiter, 84.

Regarding claims 5, 6, and 7, Taniyama teaches all of the features of the claimed invention except for a weight to press fit the paper supply roller to the separation roller by applying a load to the paper supply roller. The JP '466 patent teaches a weight, 4, that is mounted on the shaft of a roller. It would have been obvious to one of ordinary skill in the art at

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the time the invention was made to combine the weight taught by the JP '466 patent with the supply device of Taniyama in order to improve stability and reliability of the paper supply device by ensuring that the supply roller and separation roller remain in contact with each other.

Regarding independent claim 11, Taniyama teaches an image forming apparatus comprising:

- an image carrier;
- an image forming unit;
- a transfer unit (see figure 1);
- a paper supply roller, 80, that rotates in the sheets of paper supplying direction;
- a separation roller, 81, that holds the sheets of paper with the paper supply roller and maintains a driving force in the direction reverse to the paper supplying direction.

Regarding dependent claims 13 and 14, Taniyama further teaches:

- the paper supply roller is connected to a driving mechanism, column 4, lines 11+, for rotating in the sheet supplying direction at one end of the shaft and press fits to the separation rollers using one ends of the shaft are a revolving point, see figure 2;
- the separation roller retains the driving force in the direction reverse to the paper supplying direction via a torque limiter, 84.

Regarding claims 11 and 12, Taniyama teaches all of the features of the claimed invention except for a weight to press fit the paper supply roller to the separation roller by applying a load to the paper supply roller. The JP '466 patent teaches a weight, 4, that is mounted on the shaft of a roller. It would have been obvious to one of ordinary skill in the art at

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the time the invention was made to combine the weight taught by the JP '466 patent with the supply device of Taniyama in order to improve stability and reliability of the paper supply device by ensuring that the supply roller and separation roller remain in contact with each other.

*Allowable Subject Matter*

Claim 10 is objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

The following is a statement of reasons for the indication of allowable subject matter: Claim 10 claims the specific distribution of force between the elastic member and the weight, where the elastic member and the weight each produce  $\frac{1}{2}$  of the press fitting force. This relationship is not taught by the prior art, nor would it have been obvious to one of ordinary skill in the art to design the weight and elastic member so that the force is shared equally among the two.

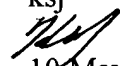
Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kaitlin S. Joerger whose telephone number is 571-272-6938. The examiner can normally be reached on Monday - Friday 9-5.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Eileen Lillis can be reached on 571-272-6928. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

ksj



10 May 2006



**JAMES W. KEENAN**  
PRIMARY EXAMINER